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City of Memphis

City of Memphis Retirement System

Actuarial valuation as of July 1, 2012

pwc

October 31, 2012

Mr. Brian Collins
Director, Division of Finance
City of Memphis
125 North Main Street
Memphis, Tennessee 38103

Dear Mr. Collins,

We are pleased to present this report containing the results of the July 1, 2012 actuarial valuation of the City of Memphis Retirement System, pursuant to our engagement letter with the City of Memphis dated October 27, 2010.

The City of Memphis retained PricewaterhouseCoopers LLP to perform an actuarial valuation of the Retirement System for the purposes of:

Calculating the necessary information for accounting and reporting requirements in accordance with Government Accounting Standards Board Statements No. 25 and No. 27 (GASB 25 and 27). This valuation has been conducted in accordance with the required Actuarial Standards of Practice as issued by the American Academy of Actuaries.

Actuarial calculations under GASB 25 and 27 are for purposes of fulfilling the City's financial accounting requirements. The calculations reported herein have been made on a basis consistent with our understanding of GASB 25 and 27.

In preparing the results presented in this report, we have relied upon information the City of Memphis provided to us regarding plan provisions, plan participants, unaudited plan assets and benefit payments. The census data and plan asset information used in calculating the results herein were collected as of June 30, 2012. While the scope of our engagement did not call for us to perform an audit or independent verification of this information, we have reviewed this information for reasonableness. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information.

GASB 25 and 27 require that each significant assumption reflect the best estimate of the Plan's future experience solely with respect to that assumption. The City of Memphis has determined and taken responsibility for the actuarial assumptions and the accounting policies and methods employed in the valuation of obligations and costs.

A range of results, different from those presented in this report could be considered reasonable. Future actuarial measurements may differ significantly from the current measurement presented in this report due to a number of factors including but not limited to: plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methods used for these measurements

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(such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status), rounding conventions and changes in plan provisions or applicable law. Due to the limited scope of this report, an analysis of the potential range of such future measurements has not been performed.

This report was prepared for the internal use of the City of Memphis in connection with our actuarial valuation of the Plan and not for reliance by any other person. PwC disclaims any contractual or other responsibility or duty of care to others based upon the services or deliverables provided in connection with this report.

This report does not purport to comply with any other purposes not stated herein. Significantly different results from what is presented in this report may be needed for other purposes.

This document was not intended or written to be used, and it cannot be used, for the purpose of avoiding U.S. federal, state or local tax penalties. This includes penalties that may apply if the transaction that is the subject of this document is found to lack economic substance or fails to satisfy any other similar rule of law.

The undersigned actuary is a member of the Society of Actuaries and the American Academy of Actuaries and meets the "Qualification Standards for Actuaries Issuing Statements of Actuarial Opinion in the United States" relating to pension plans. To the best of our knowledge, the individuals involved in this engagement have no relationship that may impair, or appear to impair, the objectivity of our work.

We appreciate this opportunity to be of service to the City of Memphis. We are available to answer any questions with respect to our report.

Respectfully submitted,

Jerrold Dubner

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A. Historical Summary of Principal Valuation Results

	July 1, 2012	July 1, 2011	July 1, 2010	July 1, 2009	July 1, 2008
Annual Funding :					
Suggested Contribution	$90,363,000	$89,006,000	$80,021,000	$71,447,000	$21,208,000
Percent of Covered Payroll	30.3%	28.1%	25.9%	24.1%	7.5%
Government Accounting Standards Board Statement #27:					
Annual Pension Cost (APC)	$88,989,000	$88,291,000	$79,883,000	$71,836,000	$24,648,000
Percent of APC contributed		23%	25%	24%	66%
End of Year Net Pension Obligation (Asset)		$142,125,000	$73,942,000	$14,191,000	($40,226,000)
Assets at beginning of plan year:					
Market Value of Assets	$1,949,085,000	$2,001,504,000	$1,727,794,000	$1,612,234,000	$2,111,225,000
Actuarial Value of Assets	$1,867,934,000	$1,838,424,000	$1,805,071,000	$1,773,457,000	$2,184,255,000
Estimated ROI (on market value)	2.67%	22.67%	13.08%	-18.57%	-6.12%
Participation at beginning of plan year:					
Number of participants:					
Active:					
General	2,211	2,283	2,392	2,484	2,620
Police & Firemen	3,882	3,990	3,888	3,792	3,386
Terminated Vested *	173	81	120	116	138
Retired and beneficiaries	3,772	3,648	3,557	3,462	3,406
Disabled	633	640	648	641	638
DROP	335	282	200	151	200
TOTAL	11,006	10,924	10,805	10,646	10,388
Covered payroll	$298,250,000	$316,434,000	$308,889,000	$296,134,000	$281,040,000
Annual benefits in pay status	151,899,000	146,178,000	138,368,000	130,606,000	126,432,000
Average attained age for active participants	43.0	42.6	42.3	42.1	42.0

* 67 plan participants had terminated as of the valuation date, but had not yet received a refund of their contributions.

B. Actuary's Comments

Annual Contribution Requirement

The City's suggested contribution for the 2012 - 2013 plan year is $90,363,000, an increase of $1,357,000 over the prior year. This suggested contribution is comprised of the normal cost ($33,492,000), the amortization of unfunded actuarial liability ($50,566,000), and interest on both of these components ($6,305,000). Details of this calculation can be found in Section II - Funding, Exhibit A.

As shown above, there are two main components that comprise the suggested annual contribution. The first component is the normal cost, which is the cost of additional benefits accrued during the current year. The normal cost as a percentage of covered payroll stayed relatively flat at about 11.0% compared to the prior year. This is to be expected under the Entry Age Normal Cost Method, which determines the normal cost as a fixed percentage of compensation of each active participant. The normal cost decreased by $1,293,000 from $34,785,000 in 2011 to $33,492,000 in 2012 and the covered payroll decreased from $316,434,000 in 2011 to $298,250,000 in 2012.

The second component of the suggested annual contribution is the amortization of the unfunded actuarial liability (which is determined as the 30 year amortization of the excess of the liability over the actuarial value of assets). The unfunded actuarial liability includes actuarial gain or loss in both the assets and the benefit obligation.

The asset value used to determine the annual required contribution is an actuarial value that "smoothes" fluctuations in the market value from year to year, while ensuring that the actuarial value stays within a "10% corridor" of the market value of assets. If the actuarial value of assets remains within the corridor, then there is no actuarial gain or loss due to asset experience for the period. The return on the market value of assets for the period ending June 30, 2012 was approximately 2.67%. However, because the "loss" relative to the assumed 7½% was within the corridor, there was no asset experience loss for the period ending June 30, 2012.

Regarding the benefit obligation, there was an aggregate liability gain of 0.7%, or approximately $18 million. The main components of the actuarial gain include:

1) A loss of approximately $7.7M (or 0.3%) due to experience and new entrants.
2) A gain of approximately $75.7M (or 3.0%) due to salary increases less than expected.
3) A loss of approximately $11.1M (or 0.5%) due to the granting of retiree COLAs.
4) A loss of approximately $38.9M (or 1.6%) due to the update to the mortality assumption.

Although there was a small actuarial gain in the liability, there was an increase in the suggested contribution due to the fact that the total City contribution of $20,108,000 in 2011 was less than the suggested contribution of $89,006,000.

Changes since Last Year

The last actuarial valuation of the City of Memphis Retirement System was performed as of July 1, 2012. Since that time, the mortality assumption for healthy participants for General employees changed from the RP-2000 Combined Mortality Table projected to 2011 using Scale AA for males and females to the Fully Generational RP-2000 Combined Mortality Table for males and females. Similarly, the mortality assumption for healthy participants for Police & Fire

employees changed from the RP-2000 Combined Mortality Table projected to 2011 using Scale AA with Blue Collar adjustment for males and females to the Fully Generational RP-2000 Combined Mortality Table using Blue Collar adjustment for males and females.

All other assumptions and plan provisions are the same as used in the prior year.

Retiree Benefit Increases

Effective July 1, 2012, the Plan was amended to provide the following ad-hoc cost of living increases to retirees:

Calendar Year of Retirement	July 1, 2012 Increase in Benefit
Before 1998	1.0%
1998 – 2003	0.5%
2004 – 2011	0.5%

A. Development of Annual Required Contribution

The Annual Required Contribution (ARC) includes the employer's normal cost and an amortization of the total unfunded actuarial liability. The Normal Cost is the portion of the cost of projected benefits that is allocated to the current year by the actuarial cost method. The unfunded actuarial liability is amortized on a level dollar basis over 30 years. The ARC for the plan year beginning July 1, 2012 was determined as follows:

	General Employees	Police & Firemen	Total
Actuarial Liability:			
Active participants	$294,968,000	$687,237,000	$982,205,000
Terminated vested participants	$3,380,000	$1,921,000	$5,301,000
Retired participants and beneficiaries	$419,852,000	$926,819,000	$1,346,671,000
Disabled participants	$28,110,000	$147,643,000	$175,753,000
Total	$746,310,000	$1,763,620,000	$2,509,930,000
Fund: the actuarial value of fund assets as of the beginning of the plan year.	$555,417,000	$1,312,517,000	$1,867,934,000
Unfunded Actuarial Liability	$190,893,000	$451,103,000	$641,996,000
Total Normal Cost at the Beginning of the Year	$17,088,000	$37,232,000	$54,320,000
Estimated Employee Contributions	($6,956,000)	($13,872,000)	($20,828,000)
Employer Normal Cost at the Beginning of the Year	$10,132,000	$23,360,000	$33,492,000
Amortization of the Unfunded Actuarial Liability	$15,035,000	$35,531,000	$50,566,000
Beginning of Year Suggested Contribution	$25,167,000	$58,891,000	$84,058,000
Interest to the end of the year	$1,888,000	$4,417,000	$6,305,000
Annual Required Contribution	$27,055,000	$63,308,000	$90,363,000
Annual Covered Payroll: the reported payroll for participants who have not attained the assumed retirement age.	$92,872,000	$205,378,000	$298,250,000

A. Statement of Plan Assets at June 30, 2012

The assets of the retirement system are held in a trust fund which is divided into separate investment funds. The City also maintains a cash management account. The following is a summary of the market value of assets in each account. The 2012 market values are based upon the Plan's June 30, 2012 investment report.

Account	Market Value at June 30, 2012	Market Value at June 30, 2011
1607 Capital Partners	$100,745,849	$131,959,789
Acadian EM Equity II	81,208,955	93,075,710
Barrow, Hanley, et al	71,198,433	150,809,085
BlackRock Granite Property Fund	27,127,219	24,153,172
Cash Management Account (In-House)	24,368,381	26,558,440
Cornerstone	4,204,995	0
Fidelity Real Estate Growth III Fund	22,279,912	0
Herndon	81,015,844	0
Highland Capital Management	100,161,547	117,416,264
Long Wharf Real Estate Partners	0	15,552,463
Mackay Shields	191,854,658	190,040,469
Marathon Asset Management	101,112,691	123,371,193
Martin Currie	0	502,498
Nicholas Investment Partners	20,932,498	0
NTGI S&P 400	76,678,845	78,523,279
Paradigm Small Cap	46,025,271	40,647,221
Platte River	20,554,958	0
Principal Global Investors	80,064,156	90,182,060
PIMCO	218,829,026	251,579,485
Prudential Core Conserv Bond	116,817,781	153,277,649
Rhumbline Russell 1000 Growth	41,079,759	153,951,645
Rhumbline S&P 500	187,113,654	237,029,440
RReef REIT II	10,627,947	10,462,343
RReef Public REITs	35,877,650	36,809,134
Seix Investment Advisors	2,725,003	21,979,863
Smith Graham	100,583,032	0
SouthernSun	47,740,565	53,622,861
Strategic Global Advisors	20,177,961	0
Winslow Capital Management	117,978,314	0
TOTAL	$1,949,085,000	$2,001,504,000

B. Development of Actuarial Value of Assets

The actuarial value of assets is developed by adjusting the actuarial value of assets as of the prior valuation for contributions, benefit payments and interest in order to develop an expected actuarial value. This amount is compared to the market value of assets and is adjusted, if necessary, to be a maximum of 110% and a minimum of 90% of the actual market value as of the valuation date.

1. Actuarial Value of Assets at July 1, 2011	$1,838,424,000
2. Interest on (1) at 7.50%	137,882,000
3. a. Employer Contributions	20,108,000
b. Employee Contributions	23,723,000
c. Benefit Payments in 2011-2012	(148,286,000)
d. Total = (a)+(b)+(c)	(104,455,000)
4. Interest on (3d) at 7.50% assumed payments occur mid-year	(3,917,000)
5. Preliminary Actuarial Value of Assets at July 1, 2012 = (1)+(2)+(3d)+(4)	1,867,934,000
6. Market Value of Assets at July 1, 2012	1,949,085,000
7. 90% of Market Value of Assets = (6) × 90%	1,754,177,000
8. 110% of Market Value of Assets = (6) × 110%	2,143,994,000
9. Final Actuarial Value of Assets = (5), but no less than (7) and no greater than (8)	1,867,934,000

Effective for periods beginning after June 15, 1997, the Government Accounting Standards Board (GASB) requires the disclosure of pension related liabilities for public employer financial statements in accordance with Statements 25 and 27 as amended by Statement 50.

A. Schedule of Funding Progress under GASB Statement No. 25

(in thousands of dollars)

Actuarial Valuation Date	Actuarial Value of Assets (a)	Actuarial Liability (AL) -- Entry Age (b)	Unfunded Actuarial Liability (UAL) (c)	Funded Ratio (a)÷(b)	Covered Payroll (d)	UAL as a Percentage of Covered Payroll (c)÷(d)
7/1/2007 *	2,121,919	2,063,051	0	102.9%	264,966	0.0%
7/1/2008	2,184,255	2,090,088	0	104.5%	281,040	0.0%
7/1/2009	1,773,457	2,222,984	449,527	79.8%	296,134	151.8%
7/1/2010	1,805,071	2,336,075	531,004	77.3%	308,889	171.9%
7/1/2011	1,838,424	2,447,974	609,550	75.1%	316,434	192.6%
7/1/2012	1,867,934	2,509,930	641,996	74.4%	298,250	215.3%

* Starting with the July 1, 2007 valuation, actuarial liability is provided under the Entry Age Normal Cost Method in order to provide information that serves as a surrogate of the funding progress of the plan.

B. Schedule of Employer Contributions under GASB Statement No. 25

(in thousands of dollars)

Plan Year Ended June 30	Annual Required Contribution	Percentage Contributed
2007	22,674	61.9%
2008	24,072	60.6%
2009	21,208	76.3%
2010	71,447	24.4%
2011	80,021	25.2%
2012	89,006	22.6%

C. Annual Pension Cost and Net Pension Asset under GASB Statement No. 27

The annual pension cost and net pension obligation (asset) to the Plan for the fiscal years ended June 30, 2011, 2012, and 2013 are as follows:

(in thousands of dollars)

Fiscal Year Ending June 30	2011	2012	2013
(1) Annual required contribution	80,021	89,006	90,363
(2) Net pension obligation (asset) beginning of year	14,191	73,942	142,124
(3) Interest on net pension obligation (asset) = [(2) × 7.5%]	1,064	5,546	10,659
(4) Amortization factor[1]	11.81039	11.81039	11.81039
(5) Adjustment to annual required contribution = [(2) ÷ (4)]	1,202	6,261	12,034
(6) Annual pension cost = [(1) + (3) – (5)]	79,883	88,291	88,988
(7) Employer contribution made	(20,132)	(20,108)	
(8) Increase (decrease) in net pension obligation = [(6) + (7)]	59,751	68,183	
(9) Net pension obligation (asset) end of year = [(2) + (8)]	73,942	142,125	

[1] The discounted present value factor is amortized at 7.50% over 30 years.

Three-year trend information is as follows:

(in thousands of dollars)

Fiscal Year Ending June 30	Annual Pension Cost (APC)	Percent of APC Contributed	Net Pension Obligation (Asset)
2010	71,836	24.2%	14,191
2011	79,883	25.2%	73,942
2012	88,291	22.8%	142,125

A. Age - Service Distribution of Active Participants as of July 1, 2012

General Employees*

Age Last Birthday	Completed Years of Service as of July 1, 2012							TOTAL
	0 - 4	5 - 9	10-14	15-19	20-24	25-29	30+	
0 - 24	15	1						16
25 - 29	67	19						86
30 - 34	107	62	30					199
35 - 39	99	66	65	13				243
40 - 44	112	66	97	53	7			335
45 - 49	91	63	96	57	41	9	1	358
50 - 54	85	53	100	74	48	25	8	393
55 - 59	67	45	84	48	36	15	10	305
60 - 64	51	41	42	36	23	6	5	204
65+	12	7	19	16	11	3	4	72
TOTAL	706	423	533	297	166	58	28	2211

* Does not include 121 employees participating in the DROP at July 1, 2012.

Active Participant Statistics	
Average Age	47.20 years
Average Service	10.33 years
Average Salary	$47,269

B. Age - Service Distribution of Active Participants as of July 1, 2012

Police Officers and Firefighters*

Age Last Birthday	Completed Years of Service as of July 1, 2012							TOTAL
	0 - 4	5 - 9	10-14	15-19	20-24	25-29	30+	
0 - 24	99							99
25 - 29	456	49	2					507
30 - 34	285	177	66	5				533
35 - 39	145	215	226	73	2			661
40 - 44	62	165	299	289	84	7		906
45 - 49	18	56	133	169	243	36		655
50 - 54	9	30	55	67	126	85	5	377
55 - 59	4	8	18	22	36	28	9	125
60 - 64			2	2	8	2	1	15
65+	1			1	1	1		4
TOTAL	1079	700	801	628	500	159	15	3882

* Does not include 214 employees participating in the DROP at July 1, 2012.

Active Participant Statistics	
Average Age	39.71 years
Average Service	11.91 years
Average Salary	$54,587

C. Age - Service Distribution of Active Participants as of July 1, 2012

Total*

Age Last Birthday	Completed Years of Service as of July 1, 2012							TOTAL
	0 - 4	5 - 9	10-14	15-19	20-24	25-29	30+	
0 - 24	114	1						115
25 - 29	523	68	2					593
30 - 34	392	239	96	5				732
35 - 39	244	281	291	86	2			904
40 - 44	174	231	396	342	91	7		1241
45 - 49	109	119	229	226	284	45	1	1013
50 - 54	94	83	155	141	174	110	13	770
55 - 59	71	53	102	70	72	43	19	430
60 - 64	51	41	44	38	31	8	6	219
65+	13	7	19	17	12	4	4	76
TOTAL	1785	1123	1334	925	666	217	43	6093

* Does not include 355 employees participating in the DROP at July 1, 2012.

Active Participant Statistics	
Average Age	42.42 years
Average Service	11.34 years
Average Salary	$51,931

D. Inactive Participants Count and Benefits as of July 1, 2012

	Number of Participants	Annual Benefit
General Employees		
Terminated Vested Participants *	76	
Retired Participants and Beneficiaries **	1574	$42,190,208
Disabled Participants	138	$2,721,168
Police and Firemen		
Terminated Vested Participants*	97	
Retired Participants and Beneficiaries **	2462	$93,060,765
Disabled Participants	495	$13,887,615
Total		
Terminated Vested Participants *	173	
Retired Participants and Beneficiaries **	4037	$135,250,973
Disabled Participants	633	$16,608,783

* 67 of these participants had terminated as of the valuation date, but had not yet received a refund of their contributions.

** Includes 121 General Plan DROP participants and 214 Police and Fire participants in the DROP at July 1, 2012.

A. Actuarial Assumptions

The assumptions and methods described in this Section were used to determine the plan funding requirements.

Mortality

General - Fully Generational RP-2000 Combined Mortality Table for males and females.

Police and Fire - Fully Generational RP-2000 Combined Mortality Table with Blue Collar adjustment for males and females.

Interest Rate 7.5% per annum.

Salary Scale 5.0% per annum.

Turnover Sample rates are shown below:

Percentage of Employees Withdrawing from Employment During the Year of Age Shown			
Attained Age	Police and Fireman	General Males	All Females
20	.070	.140	.490
25	.053	.106	.371
30	.039	.078	.273
35	.028	.056	.196
40	.018	.036	.126
45	.012	.024	.084
50	.008	.016	.056
55	.004	.008	.028

Retirement Age

Old Plan (1948)

General Employees Earlier of Age 60 and 10 years or 25 years.

Police and Firemen Earlier of Age 60 and 10 years or 30 years.

New Plan (1978)

General Employees Earliest of 25 years, Age 60 and 10 years or Age 65 and 5 years.

Police and Firemen Earlier of 25 years or Age 65 and 5 years.

A. Actuarial Assumptions (Continued)

Disability 1968 Social Security Experience Table. Sample rates are shown below:

Percentage of Employees Becoming Disabled During the Year of Age Shown		
Attained Age	Males	Females
20	.0010	.0010
25	.0010	.0010
30	.0010	.0010
35	.0010	.0010
40	.0017	.0017
45	.0028	.0028
50	.0063	.0063
55	.0133	.0133

Marriage 80% of male General Employees, 50% of female General Employees, and 90% of Police and Firemen are assumed to be married. Wives are assumed to be five years younger than their husbands.

Death/Disability Deaths and disabilities for active General employees are assumed to be other than line-of-duty. Deaths and disabilities for active Police and Firemen are assumed to be line-of-duty.

Expense Load None.

Form of Payment It has been assumed that benefits will be paid in the normal annuity form applicable to the particular benefit. It has also been assumed that the General employees who withdraw prior to retirement age will elect to receive their employee contributions times the applicable return multiple. Police and Fire employees who withdraw prior to ten years of service will receive their employee contributions, and those who withdraw after ten years of service will receive their accrued benefit.

B. Asset Valuation Method

An expected actuarial value of assets is developed by increasing the prior year's actuarial value, plus any net cash flow, by the assumed interest rate of 7.5%. If the resulting value is between 90% and 110% of actual market value, no further adjustment is made. If the resulting value is outside the 90% to 110% range, the amount is further adjusted to be a maximum of 110% of market value or a minimum of 90% of market value. The asset valuation method is designed to smooth out random fluctuations in market value that arise from year to year, while ensuring that the actuarial value of assets is reasonably related to the market value of assets.

C. Actuarial Cost Method

The actuarial cost method is the Entry Age Normal Actuarial Cost Method. This method determines a normal cost rate as a fixed percentage of compensation for each active participant. The current year's normal cost is the participant's compensation multiplied by the normal cost rate. Annual contributions in this amount, from the date the participant entered the plan (or would have entered, if the plan had always been in effect and the participant had entered at the earliest possible date) until retirement, would be sufficient to provide for the actuarial present value of the participant's plan benefits. The total normal cost is the sum of the normal costs for all active participants.

The actuarial accrued liability is the present value of future benefits, for both active and inactive participants, less the present value of future normal costs.

D. Changes in Assumptions or Methods

The mortality assumption for healthy participants for General employees changed from the RP-2000 Combined Mortality Table projected to 2011 using Scale AA for males and females to the Fully Generational RP-2000 Combined Mortality Table for males and females. Similarly, the mortality assumption for healthy participants for Police & Fire employees changed from the RP-2000 Combined Mortality Table projected to 2011 using Scale AA with Blue Collar adjustment for males and females to the Fully Generational RP-2000 Combined Mortality Table using Blue Collar adjustment for males and females.

A summary of the major plan provisions is shown below:

GENERAL EMPLOYEES

1. Effective Date

Originally effective October 1, 1948. Revised July 1, 1978, January 1, 1990, and December 1, 2000.

2. Participation

All regular salaried employees become plan participants on their date of hire. To participate in the 1948 Plan an employee must have been hired before July 1, 1978. To participate in the 1978 Plan an employee must be hired after July 1, 1978.

3. Compensation

Basic salary, excluding overtime, but including shift premium, hazardous pay, longevity pay and incentive pay.

4. Average Monthly Compensation

The highest average monthly Compensation received for any five consecutive years of service, or the most recent year's earnings, if greater.

5. Year of Service

One year of service is earned for each 12-month period beginning at date of employment. Fractional periods (months and days) are also credited.

6. Accrued Benefit

An employee may choose between (1) and (2):

(1) The sum of (a) and (b):

(a) 2¼% of Average Monthly Compensation times Years of Service before 1/1/90

plus

2½% of Average Monthly Compensation times Years of Service after 1/1/90.

Total Years of Service in part (a) must not exceed 25 years.

(b) 1% of Average Monthly Compensation times Years of Service in excess of 25 years, up to a maximum total retirement benefit of 72½%.

or

(2) Return of Employee Contributions in accordance with the following schedule:

Years of Service	Return Multiple
less than 5	1.0
5 – 14	1.5 – 2.9
15 or more	3.0

7. Minimum Accrued Benefit

Years of Service	At Age	Minimum
25 or more	no age restriction	$525 plus $21 times the lesser of 10 or years of service in excess of 25 years.
15 or more	on or after 65	$500 plus $1 times the lesser of 25 or years of service.
less than 25	before 65	The greater of $262.50 or $21 times years of service.

8. Normal Form of Annuity

If single, an annuity for the life of the participant. A married participant will receive this annuity during his lifetime with a 75% continuation to his spouse upon his death. For 1948 plan participants, 100% of the annuity is payable to the spouse upon the death of the participant.

9. Normal Retirement

Effective from the July 1, 2000 valuation, the plan provisions were changed to be consistent with the plan amendments adopted by the City Council in December 2000. The new provisions are as follows:

Date: For 1978 plan participants, first day of the month coincident with or next following the earliest of the following dates:

a) Age 60 and completion of 10 Years of Service;

b) Age 65 and completion of 5 Years of Service; or

c) Completion of 25 Years of Service.

For 1948 plan participants, first day of the month coincident with or next following the earlier of the following dates:

a) Age 60 and completion of 10 Years of Service; or

b) Completion of 25 Years of Service.

For elected and appointed participants hired before November 1, 2004, first day of the month coincident with or next following completion of 12 Years of Service.

Benefit Amount: Accrued Benefit determined as of Normal Retirement Date.

10. Disability

Eligibility:	No service requirement for line-of-duty; five years of service for non line-of-duty.
Line-of-Duty:	A participant who becomes disabled while performing City duties is entitled to receive the greater of: 1) 60% of Average Monthly Compensation as of date of disability; or 2) Accrued Benefit as of date of disability.
Other:	A participant of the 1948 Plan who becomes disabled while actively employed for reasons other than line-of-duty is entitled to receive the greater of: 1) 25% of Average Monthly Compensation as of date of disability; or 2) Accrued Benefit as of date of disability, but not greater than 56.25% of Average Monthly Compensation. A participant of the 1978 Plan who becomes disabled while actively employed for reasons other than line-of-duty is entitled to receive his Accrued Benefit as of date of disability.

11. Termination of Employment

Eligibility:	Termination of employment after completion of 10 Years of Service.
Benefit Amount:	Accrued Benefit determined as of termination date becomes payable at age 65. At the option of the participant, the benefit may become payable earlier, but is reduced to reflect early commencement. If an employee terminates before completing 10 Years of Service, he is only eligible to receive the return of Employee Contributions times the appropriate multiple.

12. Involuntary Retirement

Eligibility:	Completion of 15 years of service.
Benefit Amount:	For 1948 Plan participants, Accrued Benefit determined as of involuntary retirement date becomes payable on date of retirement. For 1978 Plan participants, Accrued Benefit determined as of date of involuntary retirement becomes payable when age plus service equals 75.

14. <u>Pre-Retirement Death Benefit</u>

Eligibility:	No service requirement for Line-of-Duty; 5 years of service for non Line-of-Duty.
Line-of-Duty:	The surviving spouse (or children) of a participant who dies while performing City duties is entitled to receive the greater of: 1) 60% of Average Monthly Compensation as of date of death; or 2) Accrued Benefit as of date of death.
Other:	The surviving spouse (or children) of a participant who dies while actively employed will receive 75% (100% for 1948 Plan) of the participant's Accrued Benefit as of date of the participant's death.

15. <u>Employee Contributions</u>

Employees in the 1978 plan must contribute eight percent (8%) of Compensation (changed effective July 1, 2001). Employees in the 1948 plan must contribute five percent (5%) of Compensation.

POLICE OFFICERS AND FIREFIGHTERS

1. Effective Date

Originally October 1, 1948. Revised July 1, 1978, January 1, 1990, and December 1, 2000.

2. Participation

All regular salaried police officers and firefighters become plan participants on their date of hire. To participate in the 1948 Plan an employee must have been hired before July 1, 1978. To participate in the 1978 Plan an employee must be hired after July 1, 1978.

3. Compensation

Basic salary, excluding overtime, but including shift premium, hazardous pay, longevity pay and incentive pay.

4. Average Monthly Compensation

For 1978 plan participants, the highest average monthly Compensation received for any three consecutive years of service preceding the participant's date of termination. For 1948 plan participants, the highest average monthly Compensation received for any five consecutive years of service, or the most recent year's earnings, if greater. Policemen hired prior to January 31, 1979 who retire with thirty years of service have their accrued benefit determined based on Captain's compensation if greater than their actual compensation, regardless of their rank.

5. Year of Service

One year of service is earned for each 12-month period beginning at date of employment. Fractional periods (months and days) are also credited.

6. Accrued Benefit

The sum of (a) and (b) below:

(a) 2¼% of Average Monthly Compensation times Years of Service before 1/1/90

plus

2½% of Average Monthly Compensation times Years of Service after 1/1/90.

Total Years of Service in part (a) must not exceed 25 years.

(b) 1% of Average Monthly Compensation times Years of Service in excess of 25 years, up to a maximum total retirement benefit of 72½%.

7. Minimum Accrued Benefit

Years of Service	At Age	Minimum
25 or more	no age restriction	$525 plus $21 times the lesser of 10 or years of service in excess of 25 years.
15 or more	on or after 65	$500 plus $1 times the lesser of 25 or years of service.
less than 25	before 65	The greater of $262.50 or $21 times years of service.

8. Normal Form of Annuity

If single, an annuity for the life of the participant. A married participant will receive this annuity during his lifetime with a 75% continuation to his spouse upon his death. For 1948 plan participants, 100% of the annuity is payable to the spouse upon the death of the participant.

9. Normal Retirement

Date: For 1978 plan participants, first day of the month coincident with or next following the earlier of the following dates:

a) Age 55 and the completion of 10 Years of Service, or

b) Completion of 25 Years of Service.

For 1948 plan participants, first day of the month coincident with or next following the earlier of the following dates:

a) Age 55 and completion of 10 Years of Service, or

b) Completion of 25 Years of Service.

Effective from the July 1, 2000 valuation, the plan provisions for elected and appointed participants was changed to be consistent with the plan amendments adopted by the City Council in December 2000. The revised provision is as follows:

For elected and appointed participants hired before November 1, 2004, first day of the month coincident with or next following completion of 12 Years of Service.

Benefit Amount: Accrued Benefit determined as of Normal Retirement Date.

10. Disability

Eligibility:	No service requirement for line-of-duty; five years of service for non line-of-duty.
Line-of-Duty:	A participant who becomes disabled while performing City duties is entitled to receive the greater of: 1) 60% of Average Monthly Compensation as of date of disability; or 2) Accrued Benefit as of date of disability.
Other:	A participant of the 1948 Plan who becomes disabled while actively employed for reasons other than line-of-duty is entitled to receive the greater of: 1) 25% of Average Monthly Compensation as of date of disability; or 2) Accrued Benefit as of date of disability, but not greater than 56¼% of Average Monthly Compensation. A participant of the 1978 Plan who becomes disabled while actively employed for reasons other than line-of-duty is entitled to receive his Accrued Benefit as of the date of disability.

11. Termination of Employment

Eligibility:	Termination of employment after completion of 10 Years of Service.
Benefit Amount:	Accrued Benefit determined as of termination date becomes payable at age 60. At the option of the participant, the benefit may become payable earlier, but is reduced to reflect early commencement. If an employee terminates before completing ten Years of Service, he is only eligible to receive the return of his contributions.

12. Involuntary Retirement

Eligibility:	Completion of 15 years of service.
Benefit Amount:	For 1948 Plan participants, Accrued Benefit determined as of involuntary retirement date becomes payable on date of retirement. For 1978 Plan participants, Accrued Benefit determined as of date of involuntary retirement become payable when age plus service equals 70.

13. Pre-Retirement Death Benefit

Eligibility: No service requirement for Line-of-Duty; five years of service for non Line-of-Duty.

Line-of-Duty: The surviving spouse (or children) of a participant who dies while performing City duties is entitled to receive the greater of:

1) 60% of Average Monthly Compensation as of date of death; or

2) Accrued Benefit as of date of death.

Other: The surviving spouse (or children) of a participant who dies while actively employed will receive 75% (100% for 1948 Plan) of the participant's Accrued Benefit as of date of death.

14. Employee Contributions

Employees are required to contribute a percentage of Compensation in accordance with the following schedule:

1948 Plan

Years of Service at 1/1/90	Percentage
up to 15 years	5.50%
15 - 19 years	5.25%
20 years or more	5.00%

1978 Plan

Date of Hire	Percentage
If hired on or after 7/1/83	6.50%
If hired before 7/1/83	6.25%